

Amendments to the Claims

Claims 1-54 (Canceled).

55. (New): A semiconductor processing method comprising:
providing a semiconductor substrate comprising a first hydrophobic material, a second hydrophilic material received outwardly of the first hydrophobic material, and a third hydrophobic material received outwardly of the second hydrophilic material;

forming an opening through the third and second materials to the first material; and

exposing the first, second and third materials to a solution comprising ozone, water and a surfactant effective to form an oxide layer on the first hydrophobic material within the opening.

56. (New): The method of claim 55 wherein the exposing is effective to form the oxide layer to be self-limiting in thickness to be less than or equal to 1 nanometer thick.

57. (New): The method of claim 55 wherein the surfactant comprises a non-ionic material.

58. (New): The method of claim 55 wherein the surfactant comprises a quaternary ammonium chloride material.

59. (New): The method of claim 55 wherein the surfactant comprises a nonionic material selected from the group consisting of an ethoxylated sorbitan monooleate, and functional equivalents of ethoxylated sorbitan monooleate.

60. (New): The method of claim 55 wherein the exposing comprises spraying the substrate with the solution within a chamber, the spraying comprising maintaining the solution at a first temperature between approximately 20° C and approximately 95° C, and the chamber at a second temperature between approximately 20° C and approximately 95° C.

61. (New): The method of claim 60 wherein the first temperature and second temperature are approximately equal.

62. (New): The method of claim 60 wherein the first temperature is higher than the second temperature.

63. (New): The method of claim 60 wherein the first temperature is maintained between approximately 65° C and approximately 95° C.

64. (New): The method of claim 55 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber.

65. (New): The method of claim 55 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber which is greater than concentration of ozone in the solution.

66. (New): The method of claim 55 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber, the gaseous atmosphere having a pressure in excess of atmospheric pressure.

67. (New): The method of claim 55 wherein the water is deionized water.

68. (New): The method of claim 55 wherein the first hydrophobic material comprises silicon.

69. (New): The method of claim 55 wherein the second hydrophilic material comprises silicon oxide.

70. (New): The method of claim 55 wherein the third hydrophobic material comprises silicon.

71. (New): The method of claim 70 wherein the third hydrophobic material comprises polysilicon.

72. (New): A semiconductor processing method comprising:
providing a semiconductor substrate comprising a silicon containing region, a silicon oxide containing layer received outwardly of the silicon containing region, and a polysilicon containing layer received outwardly of the silicon oxide containing layer;

forming an opening through the polysilicon containing layer and the silicon oxide containing layer to the silicon containing region; and

exposing the polysilicon containing layer, the silicon oxide containing layer and the silicon containing region to a solution comprising ozone, water and a surfactant effective to form a silicon oxide comprising layer on the silicon containing region within the opening.

73. (New): The method of claim 72 wherein the exposing is effective to form the oxide layer to be self-limiting in thickness to be less than or equal to 1 nanometer thick.

74. (New): The method of claim 72 wherein the surfactant comprises a non-ionic material.

75. (New): The method of claim 72 wherein the surfactant comprises a quaternary ammonium chloride material.

76. (New): The method of claim 72 wherein the surfactant comprises a nonionic material selected from the group consisting of an ethoxylated sorbitan monooleate, and functional equivalents of ethoxylated sorbitan monooleate.

77. (New): The method of claim 72 wherein the exposing comprises spraying the substrate with the solution within a chamber, the spraying comprising maintaining the solution at a first temperature between approximately 20° C and approximately 95° C, and the chamber at a second temperature between approximately 20° C and approximately 95° C.

78. (New): The method of claim 77 wherein the first temperature and second temperature are approximately equal.

79. (New): The method of claim 77 wherein the first temperature is higher than the second temperature.

80. (New): The method of claim 77 wherein the first temperature is maintained between approximately 65° C and approximately 95° C.

81. (New): The method of claim 72 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber.

82. (New): The method of claim 72 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber which is greater than concentration of ozone in the solution.

83. (New): The method of claim 72 further comprising providing a gaseous atmosphere comprising a concentration of ozone within the process chamber, the gaseous atmosphere having a pressure in excess of atmospheric pressure.

84. (New): The method of claim 72 wherein the water is deionized water.